

IT513US

MAIKP125US

# BIDIRECTIONAL TRANSMITTING AND RECEIVING DEVICE

## REFERENCE TO RELATED APPLICATIONS

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This application claims the benefit of the priority date of German Application DE 103 11 570.6, filed on March 10, 2003, and is related to U.S. Application No.

3-31-06

JDS

10/797,814, filed on March 10, 2004 (Attorney

10 Docket No. MAIKP123US) the contents of which are herein incorporated by reference in their entirety.

## FIELD OF THE INVENTION

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The invention relates to a bidirectional transmitting and receiving device.

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## BACKGROUND OF THE INVENTION

Bidirectional optical modules are known which communicate with one another using a monomode glass fiber in the opposite direction. The modules comprise a transmitting component, a receiving component and an optical arrangement, by means of which the beam paths are superimposed and split. The light that is emitted from the transmitting component generally, but not necessarily, is at a different wavelength than the light which is detected by the receiving component. For example, the transmitting component emits light at a wavelength of 1300 nm, and the receiving component detects light at the wavelength of 1550 nm.

35 A module of the cited type is known from WO 99/54594 A1. A partially reflective mirror which acts on a wavelength-selective basis is provided in